

What is Claimed is:

1. Sheet separate-feeding apparatus comprising:

a sheet stacking portion;

a separation roller which is attached to a rotary shaft arranged orthogonally to a sheet feeding direction to rotate with rotation of said rotary shaft, and feeds out the sheet placed on said sheet stacking portion;

a separation pad which nips the sheet between said separation roller and it and separates its sheet from the other sheets; and

stopper levers which are arranged on both sides of a contact portion on said sheet feeding surface between said separation roller and said separation pad so that they can come in and out, and which receive the sheet inserted from the sheet stacking portion.

2. Sheet separate-feeding apparatus comprising:

a sheet stacking portion;

a separation roller which is arranged orthogonally to a feeding direction of said sheet, attached to a rotary shaft to rotate with rotation of said rotary shaft, and feeds out the sheet placed on said sheet stacking portion;

a separation pad which nips the sheet between said separation roller and it and separates its sheet from the other sheets;

stopper levers which are arranged in positions between which said separation pad is interposed so that it can come in and out, and receive the sheet inserted from the sheet stacking portion;

a movable sheet stacking portion which is arranged so that it can tilt from said separation roller to the said sheet stacking portion side; and

a mechanism for protruding said stopper lever in cooperation with tilting of said movable sheet stacking portion.

3. The sheet separate-feeding apparatus according to Claim 1, wherein said stopper lever is arranged on this side in said feeding direction in the vicinity of the contact portion between said separation roller and said separation pad.

4. The sheet separate-feeding apparatus according to Claim 1, comprising:

a cover which is arranged at a sheet insertion inlet openably; and

a lever operating mechanism which causes said stopper lever to come in and out in cooperation of opening and closing of said cover.

5. The sheet separate-feeding apparatus according to Claim 2, wherein a cover arranged at a sheet insertion inlet

openably is provided;

there are provided stopping members arranged on both sides of said movable sheet stacking portion, and cover stopping portions for pushing the stopping members, which are arranged on both ends of said cover; and

said movable sheet stacking portion is tilted in cooperation with opening and closing of said cover.

6. The sheet separate-feeding apparatus according to Claim 4, wherein said lever operating mechanism comprising:

a nearly L-shaped lever member, of which one end includes said stopper lever and of which the other end includes a pushing side end portion, and which is rotatably supported at its bending portion;

a movable sheet stacking portion which extends from said sheet stacking portion in the sheet feeding direction, is supported on said sheet stacking portion side, and is arranged so that it can tilt;

a lever pushing portion which is provided for said movable sheet stacking portion, and pushes said pushing side end portion by tilting of said movable sheet stacking portion in the direction where said stopper lever is protruded;

stopping members arranged on both sides of said movable sheet stacking portion; and

cover stopping portions which are formed on both sides

of said cover protrusively toward said stopping members, and press said stopping members in cooperation with opening and closing of said cover to tilt said movable sheet stacking portion.

7. The sheet separate-feeding apparatus according to Claim 1, further comprising a catch portion formed protrusively to the contact side of said stopper lever with said sheet.

8. The sheet separate-feeding apparatus according to Claim 1, further comprising a catch portion formed protrusively to the contact side of said stopper lever with said sheet.

9. A sheet separate-feeding apparatus comprising:  
a sheet stacking portion;  
a sheet feeding surface extending from the sheet stacking portion in a sheet feeding direction;

a separation roller which is attached to a rotary shaft arranged orthogonally to said sheet feeding direction thereby to rotate with rotation of said rotary shaft, and feeds out the sheet placed on said sheet stacking portion onto the sheet feeding surface;

a separation pad which is arranged on said sheet feeding surface and brought into pressure-contact with said separation roller with the sheet nipped between said separation roller and it;

stopper levers which are arranged on both sides of a contact portion on said sheet feeding surface between said separation roller and said separation pad so that they can come in and out;

a nearly L-shaped lever member, of which one end includes said stopper lever and of which the other end includes a pushing side end portion, and which is rotatably supported at its bending portion;

a movable sheet stacking portion which extends from said sheet stacking portion in the sheet feeding direction, is supported on said sheet stacking portion side, and is arranged so that it can tilt;

a lever pushing portion which is provided for said movable sheet stacking portion, and pushes said pushing side end portion by tilting of said movable sheet stacking portion in the direction where said stopper lever is protruded;

stopping members arranged on both sides of said movable sheet stacking portion; and

cover stopping portions which are formed on both sides of said cover protrusively toward said stopping members, and press said stopping members in cooperation with opening and closing of said cover thereby to tilt said movable sheet stacking portion.